



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,870	08/23/2001	Gang Luo	9920 (NCRC-0053-US)	9464

26890 7590 12/31/2003

JAMES M. STOVER
NCR CORPORATION
1700 SOUTH PATTERSON BLVD, WHQ4
DAYTON, OH 45479

EXAMINER

CORRIELUS, JEAN M

ART UNIT	PAPER NUMBER
----------	--------------

2172

DATE MAILED: 12/31/2003

2

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/935,870

Applicant(s)

LUO ET AL.

Examiner

Jean M Corrielus

Art Unit

2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 23-31 is/are rejected.
- 7) ☒ Claim(s) 18-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 2172

DETAILED ACTION

1. This first office action is in response to the application filed on August 23, 2001, in which claims 1-31 are pending for examination.

Drawings

2. Applicants are required to furnish the formal drawings in response this office action. No new matter may be introduced in the required drawing. Failure to timely submit a drawing will result in **ABANDONMENT** of the application. (See attachment for PTO-948).

Claim Rejections - 35 U.S.C. § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35

Art Unit: 2172

U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-17 and 23-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Anjur et al (hereinafter “Anjur”) US Patent Application Publication no. 2002/0198863.

As to claim 1, Anjur discloses the claimed features “providing random number generators in the plurality nodes” (page 2, [0017]-[0020]); “generating in parallel random numbers using the random number generators in the plurality nodes” (page 3, [0037]; page 4, [0046]-[0048]); and “performing random sampling using the generated random numbers” (page 4, [0039]-[0040]).

As to claim 2, Anjur discloses the claimed “proving random number generators in a t least some of the plurality nodes” (page 4, [0046]-[0048]).

As to claim 3, Anjur discloses the claimed “using at least one other random number generator to generate random numbers provided as to the first set of random number generators”page 4, [0046]-[0048]).

As to claim 4, Anjur discloses the claimed “determining a number of random samples to select in each node based on the generated random numbers in the node”page 4, [0046]-[0048]).

Art Unit: 2172

As to claim 5, Anjur discloses the claimed “providing a plurality of parameters” (col.); “adjusting values of the parameters based on values of the random numbers” (col.); and “determining a number of random samples to select based on the parameters” (col.).

As to claim 6, Anjur discloses “associating the parameters with corresponding predefined ranges” (page 4, [0043]-[0048]); “determining which range each random number falls within” (page 4, [0046]-[0048]); and “adjusting the value of the one of the parameters based on the determined range of each random number” (page 4, [0046]-[0048]).

As to claim 7, Anjur discloses the claimed “incrementing the value of the parameter” (page 4, [0046]-[0048]).

As to claim 8, Anjur discloses the claimed “wherein incrementing the value of the one parameter occurs in response to each occurrence of a random number in the determined range” (page 4, [0046]-[0048]).

As to claim 9, Anjur discloses the claimed “wherein incrementing the value of the one parameter occurs in response to each occurrence of a random number in the determined range” (page 4, [0046]-[0048]).

Art Unit: 2172

As to claim 10, Anjur discloses the claimed “communicating certain of the parameters between nodes each node determining the number of random samples based on the communicated parameters” (col.).

As to claim 11, discloses the claimed “defining plurality plural ranges”(page 4, [0041]-[0048]); “counting a number of occurrences of random numbers in each of the plural ranges” (page 4, [0041]-[0048]).

As to claim 12, Anjur discloses claimed “storing plural parameters having values set to represent the number of occurrences of random numbers in corresponding ranges”(page 4, [0041]-[0048]).

As to claim 13, Anjur discloses the claimed “generating random number seeds at one node”(page 2, [0017]-[0020]); “sending the random number seeds to plural nodes from the one node”(page 3, [0037]; page 4, [0046]-[0048]); and “the random number generators in the plural nodes using corresponding random number seeds”(page 4, [0039]-[0040]).

As to claims 14-17:

Claim 14-17 are for systems performed by the method of claims 1-13. They are, therefore, rejected under the same rationale.

Art Unit: 2172

As to claims 23-31:

Claims 23-31 are for article comprising at least one storage medium storing instructions performed by the method of claims 1-13. They are, therefore, rejected under the same rationale.

Allowable Subject Matter

5. Claims 18-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reason For Allowance

6. The following is an examiner's Statement of Reasons for Allowance:

The present application has been thoroughly reviewed. Upon searching a variety of databases, the examiner respectfully submits that the cited features --wherein the plural nodes comprises nodes I, I=1-L, wherein the first random number generator is adapted to generate random number seeds s_i , I=1-L, and wherein the one node is adapted to send each random number seed s_i to node I" as recited by the independent claims 18 and in conjunction with all the limitations of the dependent claims are not taught or suggested by the prior art made of record (PTO-892 and 1449), either alone or in combination. Therefore, claims 18-22 are hereby allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

Art Unit: 2172

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. Any inquiry concerning this communication or early communication from the Examiner should be directed to **Jean M. Corrielus** whose telephone number is (703) 306-3035. The Examiner can normally be reached on Tuesday-Friday from 7:00am to 8:5:30pm. If attempts to reach the Examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu, can be reached on Monday-Friday from 9:00 a.m.-6:00 p.m. at (703)305-4393.


Any response to this action should be mailed to: Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to: (703) 872-9306, (for formal communications intended for entry)

Art Unit: 2172

Or: (703) 872-9306 (for informal or draft communications, please label "PROPOSED" or "DRAFT") Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-9600.



Jean M. Corrielus

Primary Examiner

December 29, 2003